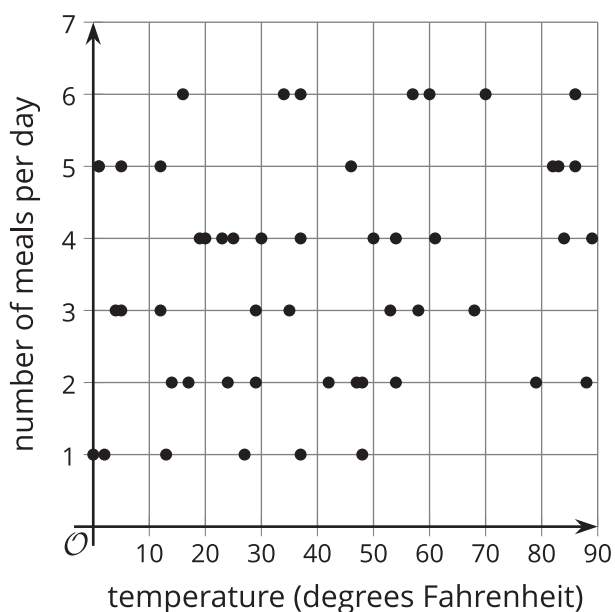
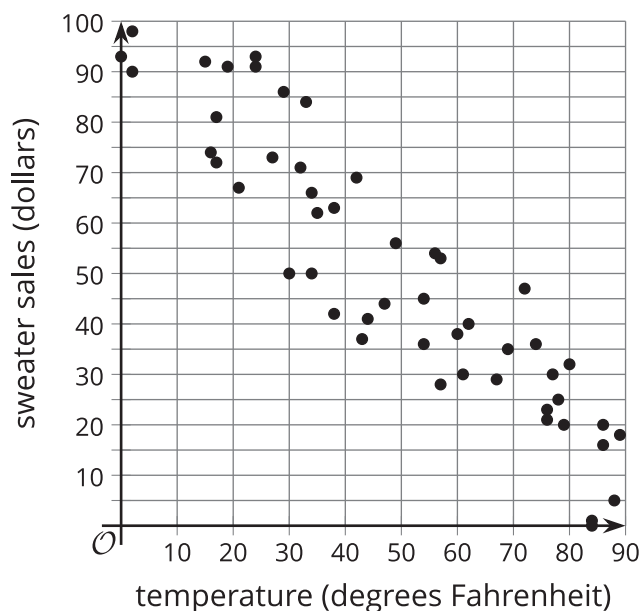
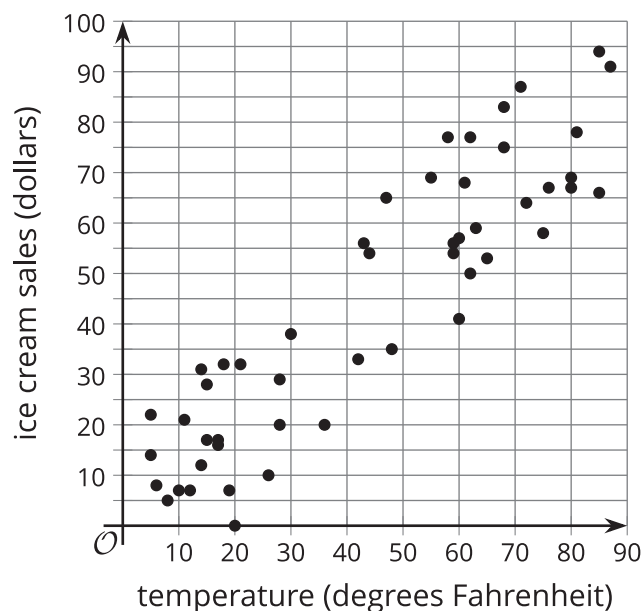


# Correlations

Let's explore correlations.

## 8.1 Notice and Wonder: Correlations

What do you notice? What do you wonder?



## 8.2 Variable Relationships

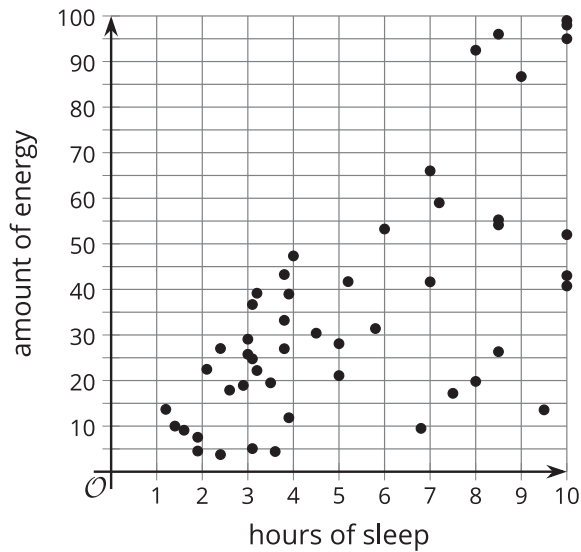
1. For each pair of variables, do you expect there to be a relationship? That is, do you think a change in one variable is accompanied by a change in the other variable? How do you expect the second variable to change if the first variable is increased?



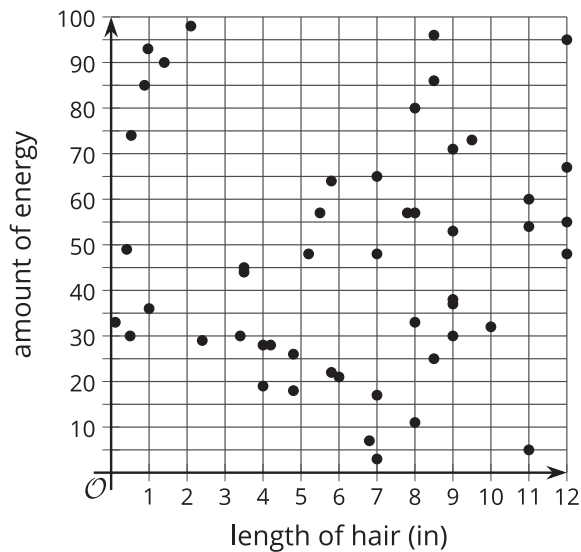
- a. hours of sleep and energy level
- b. length of hair and energy level
- c. number of school events each week and time spent watching videos online each week
- d. temperature and watermelon sales

2. Some data is collected for each pair of variables listed and represented by a scatter plot. For each pair of variables, how do the scatter plots support or contradict your answers from the previous question?

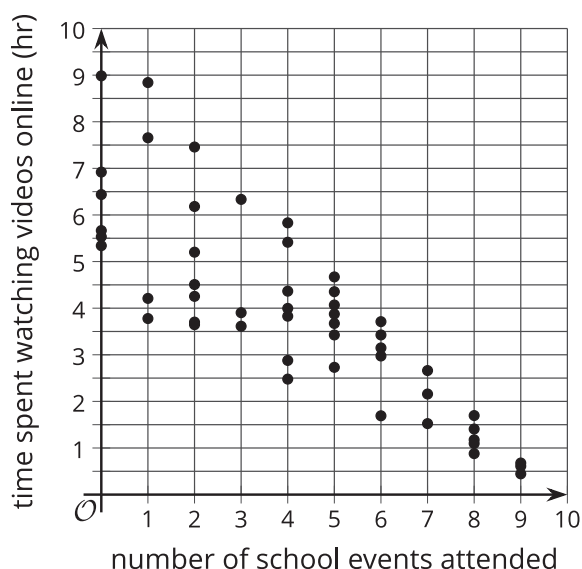
a.



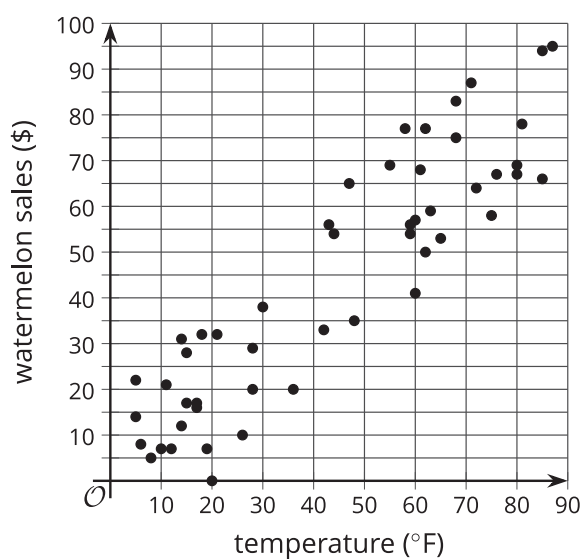
b.



c.



d.



## 8.3

## Card Sort: Correlations

Your teacher will give you a set of cards. Take turns with your partner to match each scatter plot with a pair of variables.

1. For each match that you find, explain to your partner how you know it's a match.
2. For each match that your partner finds, listen carefully to the explanation. If you disagree, discuss your thinking and work to reach an agreement.